

WHAT IS CLAIMED IS:

- 5 1. An image processing apparatus comprising:  
multiscreen synthesis means for composing one  
screen by executing a trimming process to a part of an  
input image and arranging plural pieces of that image;  
image quality adjustment value storage means for  
storing image quality adjustment values for plural  
kinds of image quality adjustment processes;  
image quality adjustment process means for  
executing the image quality adjustment processes for  
plural images on the basis of the image quality  
adjustment values stored in said image quality  
adjustment value storage means; and  
control means for converting an input image into a  
first image to which an image quality adjustment  
process was executed by said image quality adjustment  
process means on the basis of an image quality  
adjustment value before performing an image quality  
adjustment operation stored in said image quality  
adjustment value storage means, and similarly  
converting the input image into a second image to which  
an image quality adjustment process was executed by  
said image quality adjustment process means on the  
basis of an image quality adjustment value of newly  
performing an adjustment operation, then displaying the  
converted first and second images on one screen with  
arranged state by said multiscreen synthesis means.

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2. An image processing apparatus comprising:  
image enlargement and reduction means for  
enlarging and reducing an input image;

multiscreen synthesis means for composing one  
5 screen by arranging plural pieces of the input image  
reduced by said image enlargement and reduction means;

image quality adjustment value storage means for  
storing image quality adjustment values for plural  
kinds of image quality adjustment processes;

10 image quality adjustment process means for  
executing the image quality adjustment processes for  
plural images on the basis of the image quality  
adjustment values stored in said image quality  
adjustment value storage means; and

15 control means for executing an image quality  
adjustment process to an input image by said image  
quality adjustment process means on the basis of an  
image quality adjustment value before performing an  
image quality adjustment operation stored in said image  
20 quality adjustment value storage means and converting  
the input image into a first image which was reduced by  
said image enlargement and reduction means, and  
similarly executing an image quality adjustment process  
to the input image by said image quality adjustment  
25 process means on the basis of an image quality  
adjustment value of newly performing an adjustment  
operation and converting the input image into a second

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image which was reduced by said image enlargement and reduction means, then displaying the converted first and second images on one screen with arranged state by said multiscreen synthesis means.

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3. An image processing apparatus comprising:  
image enlargement and reduction means for enlarging and reducing an input image;

multiscreen synthesis means for composing one  
10 screen by executing a trimming process to a part of the image reduced by said image enlargement and reduction means and arranging plural pieces of that image;

image quality adjustment value storage means for storing image quality adjustment values for plural  
15 kinds of image quality adjustment processes;

image quality adjustment process means for executing the image quality adjustment processes for plural images on the basis of each of combinations of the image quality adjustment values stored in said  
20 image quality adjustment value storage means; and

control means for executing an image quality adjustment process to an input image by said image quality adjustment process means on the basis of an image quality adjustment value before performing an  
25 image quality adjustment operation stored in said image quality adjustment value storage means and converting the input image into a first image which was reduced by

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said image enlargement and reduction means, and  
similarly executing an image quality adjustment process  
to the input image by said image quality adjustment  
process means on the basis of an image quality  
5 adjustment value of newly performing an adjustment  
operation and converting the input image into a second  
image which was reduced by said image enlargement and  
reduction means, then displaying the converted first  
and second images on one screen with arranged state by  
10 said multiscreen synthesis means.

4. An apparatus according to Claim 1, wherein  
images which are displayed on one screen with arranged  
state by said multiscreen synthesis means are two  
15 pieces, and the image quality adjustment value before  
performing the image quality adjustment operation  
stored in said image quality adjustment value storage  
means coincides with a value which was previously set  
at a time of manufacturing, and said multiscreen  
20 synthesis means displays an image to which the image  
quality adjustment process was executed on the basis of  
the value which was previously set at the time of  
manufacturing and an image to which the image quality  
adjustment process was executed on the basis of the  
25 image quality adjustment value of performing the  
adjustment operation on one screen with arranged state.

5. An apparatus according to Claim 1, wherein  
images which are displayed on one screen with arranged  
state by said multiscreen synthesis means are two  
pieces, and the image quality adjustment value before  
5 performing the image quality adjustment operation  
stored in said image quality adjustment value storage  
means coincides with a value which was used just before  
starting the image quality adjustment operation, and  
said multiscreen synthesis means displays an image to  
10 which the image quality adjustment process was executed  
on the basis of the value which was used just before  
starting the image quality adjustment operation and an  
image to which the image quality adjustment process was  
executed on the basis of the image quality adjustment  
15 value of performing the adjustment operation on one  
screen with arranged state.

6. An apparatus according to Claim 1, wherein  
images which are displayed with arranged state by said  
20 multiscreen synthesis means are two pieces, and any one  
value can be selected from a value which was previously  
set at a time of manufacturing or a value which was  
used just before starting the image quality adjustment  
operation as the image quality adjustment value before  
25 performing the image quality adjustment operation  
stored in said image quality adjustment value storage  
means, and said multiscreen synthesis means displays

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any one image from an image to which the image quality  
adjustment process was executed on the basis of the  
value which was previously set at the time of  
manufacturing or an image to which the image quality  
adjustment process was executed on the basis of the  
5 value which was used just before starting the image  
quality adjustment operation and an image to which the  
image quality adjustment process was executed on the  
basis of the image quality adjustment value of  
10 performing the adjustment operation on one screen with  
arranged state.

7. An apparatus according to Claim 1, wherein  
images which are displayed with arranged state by said  
15 multiscreen synthesis means are three pieces, and the  
image quality adjustment values before performing the  
image quality adjustment operation stored in said image  
quality adjustment value storage means are two values  
which were previously set at a time of manufacturing  
20 and used just before starting the image quality  
adjustment operation, and said multiscreen synthesis  
means displays three pieces of an image to which the  
image quality adjustment process was executed on the  
basis of the value which was previously set at the time  
25 of manufacturing, an image to which the image quality  
adjustment process was executed on the basis of the  
value which was used just before starting the image

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quality adjustment operation and an image to which the  
image quality adjustment process was executed on the  
basis of the image quality adjustment value of  
performing the adjustment operation on one screen with  
5 arranged state.

8. An apparatus according to Claim 1, further  
comprising operation means for arbitrarily setting a  
reduction ratio in said image enlargement and reduction  
10 means and image arrangement or trimming position in  
said multiscreen synthesis means.

9. An image processing method comprising:  
a multiscreen synthesis step of composing one  
15 screen by executing a trimming process to a part of an  
input image and arranging plural pieces of that image;  
an image quality adjustment value storage step of  
storing image quality adjustment values for plural  
kinds of image quality adjustment processes; and  
20 an image quality adjustment process step of  
executing the image quality adjustment processes for  
plural images on the basis of each of combinations of  
the image quality adjustment values stored in said  
image quality adjustment value storage step,

25 wherein an input image is converted into a first  
image to which an image quality adjustment process was  
executed in said image quality adjustment process step

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on the basis of an image quality adjustment value  
before performing an image quality adjustment operation  
stored in said image quality adjustment value storage  
step, and similarly the input image is converted into a  
5 second image to which an image quality adjustment  
process was executed in said image quality adjustment  
process step on the basis of an image quality  
adjustment value of newly performing an adjustment  
operation, then the converted first and second images  
10 are displayed on one screen with arranged state in said  
multiscreen synthesis step.

10. An image processing method comprising:  
an image enlargement and reduction step of  
15 enlarging and reducing an input image;  
a multiscreen synthesis step of composing one  
screen by arranging plural pieces of the input image  
reduced in said image enlargement and reduction step;  
an image quality adjustment value storage step of  
20 storing image quality adjustment values for plural  
kinds of image quality adjustment processes; and  
an image quality adjustment process step of  
executing the image quality adjustment processes for  
plural images on the basis of each of combinations of  
25 the image quality adjustment values stored in said  
image quality adjustment value storage step,  
wherein an image quality adjustment process is

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executed to an input image in said image quality  
adjustment process step on the basis of an image  
quality adjustment value before performing an image  
quality adjustment operation stored in said image  
5 quality adjustment value storage step and the input  
image is converted into a first image which was reduced  
in said image enlargement and reduction step, and  
similarly an image quality adjustment process is  
executed to the input image in said image quality  
10 adjustment process step on the basis of an image  
quality adjustment value of newly performing an  
adjustment operation and the input image is converted  
into a second image which was reduced in said image  
enlargement and reduction step, then the converted  
15 first and second images are displayed on one screen  
with arranged state in said multiscreen synthesis step.

11. An image processing method comprising:  
an image enlargement and reduction step of  
20 enlarging and reducing an input image;  
a multiscreen synthesis step of composing one  
screen by executing a trimming process to a part of the  
image reduced in said image enlargement and reduction  
step and arranging plural pieces of that image;  
25 an image quality adjustment value storage step of  
storing image quality adjustment values for plural  
kinds of image quality adjustment processes; and

an image quality adjustment process step of  
executing the image quality adjustment processes for  
plural images on the basis of each of combinations of  
the image quality adjustment values stored in said  
5 image quality adjustment value storage step,

wherein an image quality adjustment process is  
executed to an input image in said image quality  
adjustment process step on the basis of an image  
quality adjustment value before performing an image  
10 quality adjustment operation stored in said image  
quality adjustment value storage step and the input  
image is converted into a first image which was reduced  
in said image enlargement and reduction step, and  
similarly an image quality adjustment process is  
15 executed to the input image in said image quality  
adjustment process step on the basis of an image  
quality adjustment value of newly performing an  
adjustment operation and the input image is converted  
into a second image which was reduced in said image  
20 enlargement and reduction step, then the converted  
first and second images are displayed on one screen  
with arranged state in said multiscreen synthesis step.

12. A recording medium which records an image  
25 display program for controlling an image processing  
apparatus by a computer, wherein said program causes  
the computer to

convert an input image into a first image to which  
an image quality adjustment process was executed on the  
basis of a stored image quality adjustment value before  
performing an image quality adjustment operation, and  
5 into a second image to which an image quality  
adjustment process was executed on the basis of an  
image quality adjustment value of newly performing an  
adjustment operation, and

10 execute a trimming process to parts of the  
converted first and second images to display obtained  
image pieces on one screen with arranged state.

13. A recording medium which records an image  
display program for controlling an image processing  
15 apparatus by a computer, wherein said program causes  
the computer to

execute an image quality adjustment process to an  
input image on the basis of a stored image quality  
adjustment value before performing an image quality  
20 adjustment operation and convert the input image into a  
first image which was reduced, and execute an image  
quality adjustment process to the input image on the  
basis of an image quality adjustment value of newly  
performing an adjustment operation and convert the  
25 input image into a second image which was reduced, and

display the converted first and second images on  
one screen with arranged state.

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14. A recording medium which records an image display program for controlling an image processing apparatus by a computer, wherein said program causes the computer to

- 5        execute an image quality adjustment process to an input image on the basis of a stored image quality adjustment value before performing an image quality adjustment operation and convert the input image into a first image which was reduced, and execute an image
- 10       quality adjustment process to the input image on the basis of an image quality adjustment value of newly performing an adjustment operation and convert the input image into a second image which was reduced, and
- 15       execute a trimming process to each part of the converted first and second images to display obtained image pieces on one screen with arranged state.

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